# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5088571

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

## **CONVEYING PARTY DATA**

Name	Execution Date
YULIN YUAN	07/16/2018
XIAOJI FAN	07/15/2018
ZHIMING YE	07/15/2018

# **RECEIVING PARTY DATA**

Name:	Huawei Technologies Co., Ltd.
Street Address:	Huawei Administration Building
Internal Address:	Bantian, Longgang District
City:	Shenzhen, Guangdong
State/Country:	CHINA
Postal Code:	518129

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15429946

# **CORRESPONDENCE DATA**

Fax Number: (312)616-5700

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: (312) 616-5600

Email: assignments@leydig.com **Correspondent Name:** LEYDIG, VOIT & MAYER, LTD.

Address Line 1: TWO PRUDENTIAL PLAZA, SUITE 4900

Address Line 2: 180 NORTH STETSON AVENUE Address Line 4: CHICAGO, ILLINOIS 60601-6731

ATTORNEY DOCKET NUMBER:	HW727884
NAME OF SUBMITTER:	KAJAL AMIN
SIGNATURE:	/Kajal Amin/
DATE SIGNED:	08/08/2018

**Total Attachments: 6** 

source=Assignments#page1.tif source=Assignments#page2.tif

> **PATENT** REEL: 046586 FRAME: 0662 505041820



PATENT REEL: 046586 FRAME: 0663

Attorney Docket No. HW727884
Client Reference No. 84183409US04

#### ASSIGNMENT

# Whereas, We,

Yulin Yuan Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA; and

Zhiming Ye Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA: Xiaoji Fan Huawci Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong

P.R.CHINA; and

have invented and own a certain invention entitled:

## NETWORK TOPOLOGY DISCOVERY METHOD AND DEVICE

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2017-02-10, under U.S. Application No. 15429946 and

WHEREAS, HUAWEI TECHNOLOGIES CO.,LTD., Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA;, hereinafter referred to as Assignee, is desirous of acquiring the entire domestic and foreign right, title, and interest in and under the invention described in the patent application.

Now, THEREFORE, for good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, we assign and transfer to the Assignee and the Assignee's legal representatives, successors and assigns the full and exclusive rights in and to the invention in the U.S. and every foreign country and the entire right, title, and interest in and to the patent application and other such applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the invention, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon, and we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

WE HEREBY AUTHORIZE the Assignee to insert in this assignment document the filing date and application number of the application if the date and number are unavailable at the time this document is executed.

WE DO HEREBY COVENANT and agree with the Assignee that we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment document set

forth herein, and that we will at any time upon request, without further or additional consideration, but at the expense of the Assignee, execute such additional assignments and other writings and do such additional acts as the Assignee may deem necessary or desirable to

In re Appln. of Yuan et al. Attorney Docket No. HW727884

perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the U.S. or of any and all foreign countries on the invention, and in enforcing any rights or chooses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of all parties hereto.

IN WITNESS WHEREOF, We have hereunder set our hands on the dates shown below.

Date July 16, 2018	Yulin Yuan
	Yulin Yuan
Date	Xiaoji Fan
Date	Zhiming Ye

Attorney Docket No. HW727884 Client Reference No. 84183409US04

#### ASSIGNMENT

# Whereas, We,

Yulin Yuan Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA; and

Zhiming Ye Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA: Xiaoji Fan Huawci Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong

P.R.CHINA; and

have invented and own a certain invention entitled:

## NETWORK TOPOLOGY DISCOVERY METHOD AND DEVICE

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2017-02-10, under U.S. Application No. 15429946 and

WHEREAS, HUAWEI TECHNOLOGIES CO.,LTD., Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA;, hereinafter referred to as Assignee, is desirous of acquiring the entire domestic and foreign right, title, and interest in and under the invention described in the patent application.

Now, THEREFORE, for good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, we assign and transfer to the Assignee and the Assignee's legal representatives, successors and assigns the full and exclusive rights in and to the invention in the U.S. and every foreign country and the entire right, title, and interest in and to the patent application and other such applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the invention, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon, and we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

WE HEREBY AUTHORIZE the Assignee to insert in this assignment document the filing date and application number of the application if the date and number are unavailable at the time this document is executed.

WE DO HEREBY COVENANT and agree with the Assignee that we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment document set

forth herein, and that we will at any time upon request, without further or additional consideration, but at the expense of the Assignee, execute such additional assignments and other writings and do such additional acts as the Assignee may deem necessary or desirable to

In re Appln. of Yuan et al. Attorney Docket No. HW727884

perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the U.S. or of any and all foreign countries on the invention, and in enforcing any rights or chooses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of all parties hereto.

IN WITNESS WHEREOF, We have hereunder set our hands on the dates shown below.

Date			
		Yulin Yuan	
Date	7/15/2018	Xiaoji Em	
		Xiaoji Fan	
Date			
		Zhiming Ye	**********

Attorney Docket No. HW727884
Client Reference No. 84183409US04

#### ASSIGNMENT

# WHEREAS, WE,

Yulin Yuan Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA; and

Zhiming Ye Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA; Xiaoji Fan Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA; and

have invented and own a certain invention entitled:

## NETWORK TOPOLOGY DISCOVERY METHOD AND DEVICE

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on 2017-02-10, under U.S. Application No. 15429946 and

WHEREAS, HUAWEI TECHNOLOGIES CO.,LTD., Huawei Administration Building Bantian, Longgang District Shenzhen, 518129, Guangdong P.R.CHINA;, hereinafter referred to as Assignee, is desirous of acquiring the entire domestic and foreign right, title, and interest in and under the invention described in the patent application.

Now, Therefore, for good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, we assign and transfer to the Assignee and the Assignee's legal representatives, successors and assigns the full and exclusive rights in and to the invention in the U.S. and every foreign country and the entire right, title, and interest in and to the patent application and other such applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the invention, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon, and we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

WE HEREBY AUTHORIZE the Assignee to insert in this assignment document the filing date and application number of the application if the date and number are unavailable at the time this document is executed.

WE DO HEREBY COVENANT and agree with the Assignee that we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment document set

forth herein, and that we will at any time upon request, without further or additional consideration, but at the expense of the Assignee, execute such additional assignments and

In re Appln. of Yuan et al. Attorney Docket No. <u>HW72788</u>4

other writings and do such additional acts as the Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the U.S. or of any and all foreign countries on the invention, and in enforcing any rights or chooses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of all parties hereto.

IN WITNESS WHEREOF, We have hereunder set our hands on the dates shown below.

Date		
	Yulin Yuan	
Date		
1740	Xìaoji Fan	-
Date My 15, ひ(8	Zhiminy te	
	Zhiming Ye	